

## **REMARKS**

### **Status of the Claims**

Claims 1, 5-18, 20-22 and 25-27 remain pending in the application.

### **Rejected Claims**

In the Examiner's Answer mailed July 7, 2011, the sole ground of rejection relates to claims 1, 5-18, 20-22 and 25-27 for being newly rejected under 35 U.S.C. § 103(a) as being unpatentable over Bukshpan *et al.* (US Patent Application Publication No. 2002/0198928) in view of Ravkin *et al.* (US Patent Application Publication No. 2003/0134330).

Claims 1, 3, 5-18, 20-22 and 25-27 were rejected under 35 U.S.C. § 102(b) as being anticipated by Bukshpan *et al.* in the final office action mailed Nov. 8, 2010. In the Amendment after Final filed Feb. 8, 2011, request was made to withdraw this rejection (the subject matter of claim 2 was incorporated into claim 1, and claims 2-4 were canceled). In the Examiner's Answer, no mention is made of any rejection under 35 U.S.C. § 102(b). For this reason, Applicants presume that this rejection has been withdrawn.

### **Claim Rejection under 35 U.S.C. § 103(a)**

The Examiner has raised a new ground of rejection of claims 1, 5-18, 20-22 and 25-27 under 35 U.S.C. § 103(a) as being unpatentable over Bukshpan *et al.* (US Patent Application Publication No. 2002/0198928) in view of Ravkin *et al.* (US Patent Application Publication No. 2003/0134330). The reasoning for the Examiner's rejection appears on pages 4-8 of the Examiner's Answer and will not be further summarized here.

The current claims relate to a device and method wherein microscopic images are recorded in a flow cuvette in which a suspension is introduced, with an optical sensor, the flow cuvette and optical sensor moving relative to one another during the measurement. A key feature, as recited in the claims, is that the optical sensor and flow cuvette are moving relative to one another while the contents of the flow cuvette are imaged. (See, *e.g.*, claim 1). Bukshpan *et al.* fails to teach any method or device in which a flow cuvette and an optical sensor move relative to one another during the optical recording of

microscopic images, as required by independent claims 1 and 20. Thus, Bukshpan *et al.* fails to disclose this feature, as recognized by the Examiner.

On page 5 of the Examiner's Answer, the Examiner cites paragraph [0147] of the Bukshpan *et al.* reference. Discussing the paragraph, the Examiner uses the term "fluidics system 1116" and the term "flow cuvette" equally. However, the fluidics system according to Bukshpan *et al.* only serves – according to Bukshpan's teaching – for guiding liquids through a single common in- and outlet into a reaction chamber or to remove liquids from the reaction chamber, respectively. According to the present invention, however, the term "flow cuvette" means that a "flow cuvette" comprises a separate inlet and outlet which means that both in- and outlet are not one and the same entry. This is a distinctive feature according to the invention because a through flow of particles or cells has to occur. Support for this is found in Figure 2 of the present application as well as [0048] of the US Patent publication document. A through flow is not possible according to the system as disclosed by Bukshpan *et al.*, so the reference does not teach a flow cuvette.

Moreover, Bukshpan *et al.*, although disclosing a motorized stage, is silent with respect to the motion of the motorized stage during the actual measurement. The claimed term "imaged" refers to recording of microscopic images while the sensor and cuvette are in relative motion. Thus, the present invention differs from Bukshpan's teaching by at least the combination of two features which have been combined in a non-obvious way:

- flow through cuvette, and
- imaging by means of a sensor element which moves during measurement along the flow cuvette.

Ravkin *et al.* does not disclose through flow cuvettes. In the context of the movement of optical sensors, Ravkin *et al.* discloses just a scanning by means of light microscopy or scanning microscopy in analogy of the process of DNA chip scanning (paragraphs [0083], [0150]). Ravkin *et al.* discloses the scanning of a slide on which compartments are arranged which have to be analyzed separately. Ravkin *et al.* discloses that the compartments are analyzed with a scanner which is moved relative to the slide. However, Ravkin *et al.* does not disclose that a continuous motion happens during imaging of the single compartments, that is, during recording of microscopic images.

Thus, even if Ravkin *et al.* and Bukshpan *et al.* were combined, it would not result in the present invention, as a person skilled in the art would not conclude that during movement the flow cuvette should be imaged, *i.e.*, have microscopic images recorded, as claimed here.

Accordingly, Applicants respectfully request withdrawal of the new ground of rejection.

All rejections having been addressed, it is respectfully submitted that this application is in condition for allowance, and Notice to that effect is respectfully requested. If the Examiner believes that a phone call to Applicants' counsel would expedite issuance of this application, the Examiner is invited to call the undersigned counsel.

Respectfully submitted,

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